

AMENDMENT TO THE CLAIMS

CLAIM 1 (currently amended):

1. Apparatus for performing call control functions in a packetized telecommunications switch comprising:

A1 a core switching fabric for transmitting traffic channels and call control messages from an input to an output;

a Master Controller connected to said core switching fabric;

a plurality of feature ~~processors~~ servers connected to said core switching fabric for performing call processing functions;

said Master Controller for receiving call processing request messages, and for transmitting call processing request messages to a selected one of said plurality of feature servers;

said feature servers for generating call control messages for transmission via said core switching fabric to peripheral equipment for implementing a call control function specified in a call control message;

wherein all call processing request messages are processed by said plurality of feature servers.

CLAIM 2 (original)

2. The apparatus of Claim 1, wherein said core switching fabric comprises a circuit switching fabric for establishing call traffic connections.

CLAIM 3 (original)

3. The apparatus of Claim 1, wherein said core switching fabric comprises a packet switching fabric for transmitting said call control messages.

CLAIM 4 (currently amended)

4. The apparatus of Claim 3, wherein said plurality of feature servers comprises a plurality of different types of feature servers for processing different kinds of call processing request messages.

CLAIM 5 (original)

5. The apparatus of Claim 3, wherein said plurality of different types of feature servers comprises a plurality of at least one type of feature server.

CLAIM 6 (original)

6. The apparatus of Claim 3, wherein said Master Controller transmits call state information to said selected one feature server.

CLAIM 7 (original)

7. The apparatus of Claim 3, wherein said Master Controller comprises duplicated equipment.

CLAIM 8 (currently amended)

8. The apparatus of Claim 7, wherein each of the duplicated equipments of said Master Controller comprises a plurality of processors.

CLAIM 9 (original)

9. The apparatus of Claim 3, wherein said Master Controller comprises duplicate equipments interconnected by update interface means for rapidly updating memory of one of said duplicated equipments from another of said duplicate equipments.

CLAIM 10 (original)

10. The apparatus of Claim 3, wherein said core switching fabric is connected to line access interface means.

CLAIM 11 (original)

11. The apparatus of Claim 4, wherein said core switching fabric is connected to trunk access interface means.

CLAIM 12 (original)

12. The apparatus of Claim 4, wherein said Master Controller performs the function of accumulating billing records.

CLAIM 13 (currently amended)

13. The apparatus of Claim 4, wherein at least one of said types of feature ~~processors~~ servers retains no state information for a call after it has completed processing one of said call processing request messages.

CLAIM 14 (currently amended)

14. The apparatus of Claim 13, wherein all call processing request messages for a feature ~~processor~~ server that retains no state information for a call are routed via said Master Controller.

CLAIM 15 (currently amended)

15. ~~The apparatus of Claim 4,~~ Apparatus for performing call control functions in a packetized telecommunications switch comprising:

a core switching fabric for transmitting traffic channels and call control messages from an input to an output;

a Master Controller connected to said core switching fabric;

a plurality of feature servers connected to said core switching fabric for performing call processing functions;

said Master Controller for receiving call processing request messages, and for transmitting call processing request messages to a selected one of said plurality of feature servers;

said feature servers for generating call control messages for transmission via said core switching fabric to peripheral equipment for implementing a call control function specified in a call control message;

wherein said core switching fabric comprises a packet switching fabric for transmitting said call control messages;

wherein said plurality of feature servers comprises a plurality of different types of feature servers;

wherein at least one of said types of feature ~~processors~~ servers retains state information for a call after it has completed processing one of said call processing request messages.

CLAIM 16 (currently amended)

16. The apparatus of Claim 15, wherein ones of said call processing messages destined for one of said feature ~~processors~~ servers which retain state information for a call are routed directly to that feature ~~processor~~ server, bypassing said master controller.

CLAIM 17 (currently amended)

17. A method of processing calls in a switching system comprising the steps of:
said switching system receiving a call processing request message;

said switching system routing said call processing request message to a Master Controller;

said Master Controller receiving and retrieving call state information for the call and terminals of the call from its database;

said Master Controller selecting one of a plurality of feature servers;

said Master Controller sending call processing request messages, including call state data to the selected feature server via a core switching fabric of said switching system;

said feature server performing call processing for said call; and

said feature server sending database update and success messages for said call to said Master Controller;

wherein all call processing request messages are processed by one of said plurality of feature servers.

CLAIM 18 (currently amended)

18. The method of Claim 17, further comprising the step of said selected feature ~~processor~~ server sending call control messages to appropriate network elements to implement call processing actions.

CLAIM 19 (original)

19. The method of Claim 18, wherein said selected feature server sends said call control messages over said core switching fabric.

CLAIM 20 (currently amended)

20. ~~The method of Claim 17;~~ A method of processing calls in a switching system comprising the steps of:

said switching system receiving a call processing request message;

said switching system routing said call processing request message to a Master Controller;

said Master Controller receiving and retrieving call state information for the call and terminals of the call from its database;

said Master Controller selecting one of a plurality of feature servers;

said Master Controller sending call processing request messages, including call state data to the selected feature server via a core switching fabric of said switching system;

said feature server performing call processing for said call; and

said feature server sending database update and success messages for said call to said Master Controller;

wherein at least one feature ~~processor~~ server retains no state information for a call after it has completed processing one of said call processing request messages, further comprising the step of routing all call processing request messages for a feature ~~processor~~ server that retains no state information for a call via said Master Controller.

CLAIM 21 (currently amended)

21. ~~The method of Claim 17, A method of processing calls in a switching system comprising the steps of:~~

said switching system receiving a call processing request message;

said switching system routing said call processing request message to a Master Controller;

said Master Controller receiving and retrieving call state information for the call and terminals of the call from its database;

said Master Controller selecting one of a plurality of feature servers;

said Master Controller sending call processing request messages, including call state data to the selected feature server via a core switching fabric of said switching system;

said feature server performing call processing for said call; and

said feature server sending database update and success messages for said call to said Master Controller;

wherein at least one of said feature ~~processors~~ servers retains state information for a call after it has completed processing one of said call processing request messages, further comprising the step of:

routing ones of said call processing messages destined for one of said feature ~~processors~~ servers which retain state information for a call are directly to that feature ~~processor~~ server, bypassing said Master controller.

CLAIM 22 (currently amended)

22. ~~The method of Claim 17, A method of processing calls in a switching system comprising the steps of:~~

said switching system receiving a call processing request message;

said switching system routing said call processing request message to a Master Controller;

said Master Controller receiving and retrieving call state information for the call and terminals of the call from its database;

said Master Controller selecting one of a plurality of feature servers;

said Master Controller sending call processing request messages, including call state data to the selected feature server via a core switching fabric of said switching system;

said feature server performing call processing for said call; and

said feature server sending database update and success messages for said call to said Master Controller;

wherein a plurality of said plurality of feature servers are identical, and wherein said Master Controller selects one of the plurality of identical feature servers in such a manner as to provide load balancing among the plurality of identical feature servers.

CLAIM 23 (new)

23. Apparatus for performing call control functions in a packetized telecommunications switch comprising:

a core switching fabric for transmitting traffic channels and call control messages from an input to an output;

a Master Controller connected to said core switching fabric;

a plurality of feature servers connected to said core switching fabric for performing call processing functions;

said Master Controller for receiving call processing request messages, and for transmitting call processing request messages to a selected one of said plurality of feature servers;

said feature servers for generating call control messages for transmission via said core switching fabric to peripheral equipment for implementing a call control function specified in a call control message;

wherein said core switching fabric comprises a packet switching fabric for transmitting said call control messages;

wherein said plurality of feature servers comprises a plurality of different types of feature servers;

wherein at least one feature server retains no static information for a call after it has completed processing one of said call processing messages; and

wherein all call processing messages for said at least one feature server are routed via said master controller.

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